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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,555	09/25/2000	Veronique M. Braud	SHP-PT059	9366

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EXAMINER	
VANDERVEGT, FRANCOIS P	
ART UNIT	**PAPER NUMBER**
1644	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/555,555	BRAUD ET AL.	
	Examiner	Art Unit	
	F. Pierre VanderVegt	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-23 and 30-49* is/are pending in the application.

4a) Of the above claim(s) *38-45* is/are withdrawn from consideration.

5)☒ Claim(s) *32-34,36 and 37* is/are allowed.

6)☒ Claim(s) *20-23,35 and 46-49* is/are rejected.

7)☒ Claim(s) *30 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This application is a rule 371 continuation of PCT Serial Number PCT/GB98/03686.

Claims 1-19 and 24-29 have been canceled.

New claims 38-49 have been added.

Claims 20-23 and 30-49 are currently pending

Election/Restrictions

1. Newly submitted claims 38-45 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Applicant has already received an action on the merits of the claimed invention of "Compounds identified by the method according to claim 20 [32] as affecting the binding of HLA-E to CD94/NKG2 receptors" (claims 23 and 35 respectively). Applicant has amended the claims in an attempt to separate small peptides from other potential embodiments, such as antibodies. However, antibodies of claims 38-45 represent a compound distinct from the compound on which Applicant has already received an examination on the merits of the claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, **claims 38-45 are withdrawn from consideration** as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Accordingly, **claims 20-23, 30-37 and 46-49 are the subject of examination** in the present Office Action.

2. **In view of Applicant's amendment and remarks filed December 6, 2004, the following grounds of rejection are maintained**.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 23 and 35 stand rejected under 35 U.S.C. 102(b) as being anticipated by Aldrich et al (1994) Cell 79:649-658, as evidenced by Brooks et al. Journal of Immunology (1999) 162:305-313.

It was previously stated: "Aldrich et al teach a compound consisting of the peptide consisting of the amino acid sequence AMAPRTLLL, which effects the binding of HLA-E to CD94/NKG2 receptors, as evidenced by Brooks et al. Brooks et al teach that the compound AMAPRTLLL associated with HLA-E is recognized by CD94/NKG2A. Therefore, the referenced teachings anticipate the claimed invention.

Applicant's arguments filed May 6, 2004 have been fully considered but they are not persuasive. Applicant argues that because Aldrich is silent regarding CD94/NKG2 receptor cells and Brooks does not suggest that CD94/NKG2 receptor cells would be present in the teachings of Aldrich, "the binding of HLA-E to CD94/NKG2 receptors cannot be an inherent property of Aldrich." Applicant further argues that since Brooks is a post filing date reference, it could not have demonstrated inherency to the artisan in 1994. Applicant appears to be misinterpreting the concept of inherency. Inherency is not a property of the reference, as contended by Applicant, rather it is a property of the peptide. The claim is drawn to a **compound** identified by a method. Irrespective of the method used to identify the peptide, the peptide will always have the same properties. For example, Artisan A happens to isolate a peptide with an antibody reactive with protein X and finds the amino acid sequence of the peptide to be AMAPRTLL. Artisan B identifies a peptide that affects the binding of HLA-E to CD94/NKG2 receptors and finds the sequence of that peptide to be AMAPRTLL. In other words, Artisan A and Artisan B have identified the same peptide by different means. There is no physicochemical difference between the peptides identified by the two artisans. The peptide of Artisan A would affect binding in the method of Artisan B and the peptide of Artisan B would be bound by the antibody of Artisan A. Applicant's discovery that the peptide AMAPRTLL affects the binding of HLA-E to CD94/NKG2 receptors did not confer any new properties on the peptide. Brooks' teaching that AMAPRTLLL associated with HLA-E is recognized by CD94/NKG2A also did not confer any new properties on the peptide. All the reference demonstrates is a property that the peptide already INHERENTLY possessed. The peptide AMAPRTLL would have been able to affect binding of HLA-E to CD94/NKG2 receptors at, and well before, the time of the teaching of that peptide sequence by Aldrich. As a compound, the peptide with the sequence AMAPRTLL was taught by Aldrich. Applicant's disclosure in the instant specification merely serves to further characterize an otherwise old product. Accordingly, irrespective of its manner of identification, the AMAPRTLLL peptide taught by the Aldrich reference is a compound that would be identified by the method of claim 20 and fully satisfies the metes and bounds of claim 23. New claim 35 is included in this ground of rejection."

Applicant's arguments filed December 6, 2004 have been fully considered but they are not persuasive.

Applicant has amended the claim to recite the phrase "as used in medical diagnostic procedures, wherein the compounds are small peptides." Applicant asserts, "Aldrich does not disclose compounds affecting the binding of HLA-E to CD94/NKG2 receptors as used in medical diagnostic procedures as recited in amended claims 23 and 35." While Applicant did not expand upon this assertion, it is apparent that Applicant feels that this recitation differentiates the claim from the cited peptide of Aldrich. However, the recitation merely constitutes an intended use clause ("used in medical diagnostic procedures"). The intended use of the small peptide does not render the claimed peptide patentable

because the use does not change the structure of the peptide. The fact remains that the peptide taught by Aldrich is the same as a peptide disclosed in the instant specification as satisfying the metes and bounds of the claimed invention. Applicant's further characterization of the same peptide at a later date does not materially change the peptide or confer new properties upon the peptide.

4. **The following represents a new ground of rejection that has been necessitated by Applicant's amendment.**

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 20-22 and 46-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a NEW MATTER rejection.

Applicant has amended the claims to recite, "any alternative NKG2 spliced form of the aforementioned group members." Applicant asserts that the amendment is supported at page 3, line 27 to page 4, line 5 of the original specification. However, the cited passage recites only that "NKG2A and B are alternative splicing products (differing by an 18 amino acid segment immediately outside the transmembrane region)." A disclosure that A and B are splice variants of one another does not constitute support for recitation of "any alternative NKG2 spliced form" of the NKG2 species disclosed in the specification. Accordingly, the recitation constitutes new matter.

Conclusion

6. Claims 32-34, 36 and 37 are allowed.

7. Claims 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Pierre VanderVegt whose telephone number is (571) 272-0852. The examiner can normally be reached on M-Th 6:30-4:00; Alternate Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

F. Pierre VanderVegt, Ph.D.
Patent Examiner
February 16, 2005

PATRICK J. NOLAN, PH.D.
PRIMARY EXAMINER
2/17/05